Remarks of Commissioner Deborah Taylor Tate International Institute of Communications TELECOMMUNICATIONS AND MEDIA FORUM November 14, 2007 As Prepared

Good Morning. I want to begin by thanking Brian Quinn, the Director General of the International Institute of Communications, for the invitation to speak here today. The International Institute of Communications focuses on the leading-edge issues in telecom and broadcasting, such as content, convergence, and changing regulatory frameworks.

And it does this at a very international level, with a board of directors that looks like a plenary meeting of the United Nations.

Today it is even more appropriate for me to be with you, as I just returned from the World Radio Conference in Geneva, where I joined Ambassador Richard Russell in negotiations regarding, as you are well aware, a number of important spectrum allocation rules. Many of you have probably participated in ITU meetings and previous WRCs. This was my first and it was truly an incredible opportunity. I am often asked what is most surprising about being an FCC Commissioner and I must say that it is all the international involvement we have, and certainly the WRC is at the top of our priorities. Issues may involve differing opinions even within our own delegation – over 160 strong at this WRC – which, as you know, involves the FCC, DOD, NASA, NTIA, Commerce, State and then all of the private delegates and participants such as Intel and Nokia and Verizon. These are truly decisions which will have a lasting impact for decades, on services and providers today as well as upon those which will develop. That is why it has been crucial regarding some of the bands to ensure that those operating are protected and yet new technologies may also one day be able to operate without interference there as

well. Also, given that many less-developed economies are able to connect their citizens and transcend many of our older networked and wireline technologies, it is important for them to access efficient technologies so as to ensure their citizens are not left behind. The plenary was exciting to participate in and to actually track many of the changes – some large, some consensus and some disputes – all on the floor. Like the U.N., this WRC provided instantaneous translation in six languages – French, English, Spanish, Russian, Chinese, and Arabic – and will provide the documents – possibly 1200 pages in all – in these six languages as well. Just this feat is incredible, and it is even more so when one considers the technical jargon and important details of telecommunications policy. And every word counts. I never knew how much weight a footnote can carry in international treaty language.

On the same trip, I spoke at the 2007 Global Forum Meeting in Venice, Italy – again, attended by over 120 countries and providing me the opportunity to reconnect with many of my colleagues that I have come to know over the past two years. The topic was "Global Convergence 2.0-Integration and Innovation," similar to the topic today. From "Super RFIDs" that can sustain moisture and light by embedding into products, to Ultra Broadband architecture, to computer voting in Switzerland, to antitrust and e-health, to data governance, security and privacy. There was also a special workshop on digital cities and wireless broadband for better managed and safer communities, and a number of presentations on converging technologies transforming government globally.

As I meet with my counterparts from all over the world, I am reminded that, as different as we are, our countries share so many issues. In addition to the colleagues with whom I met in Geneva and Venice, I also have had the opportunity over the past few

months to have productive conversations with Chairman Shehadi of the Lebanon Telecommunications Authority, who is trying to rebuild the bombed out infrastructure of his beautiful land; to negotiate bilaterals both in Bejing and again here in DC with Vice Minister Xi of the Chinese Ministry of Information Industry; spend three days in detailed discussions with Anatel and the Ministry of Communications in Brazil – in fact, one of the projects is not merely part of a Brazil-US bilateral agreement but to accomplish some important work in partnership with one or more African nations – and last week I hosted Professor Alexandridis, the President of Greece's Hellenic Telecom & Post Commission, who is trying to continue to open the telecom arena to the marketplace. In official and personal conversations, we have shared themes of developing our economies in an increasingly competitive and globally interconnected environment, and adopting policies that incentivize and encourage the development of new technologies and markets.

The themes covered by yesterday's and today's sessions are important to all of us at a global level and familiar at a personal level: new technologies and what they mean for investors and consumers, public policy as it relates to broadband deployment, and content in the age of Google and social networks. I want to speak about all three of these issues from my perspective as an FCC Commissioner. (Disclaimer: I represent only one of five Commissioners.)

New Technologies

Advances in technology are almost daily allowing us to live fuller, richer, and healthier lives than those who came before us. This Age of Innovation presents us with more technological advances coming faster than we probably expected a generation ago;

the next generation of advances almost certainly will involve even more mobility and convergence, and the generation after that may be beyond what we can imagine today.

Benjamin Franklin understood electricity but could not fully imagine the modern electrical grid, and certainly not the modern telephone systems that we take for granted. Alexander Graham Bell developed the telephone but could not fully imagine the Internet. Bill Gates helped make the personal computer a household item, but he probably did not fully see the potential for our cars and even our refrigerators to be a computer, along with every electronic device the consumer could ever wish to carry. The point is, there always will be engineers and entrepreneurs coming up with ways to make our lives even better, no matter how good things may seem right now.

We should encourage these advances in technology. We should recognize that innovators constantly engage in what the economist Joseph Schumpeter called "creative destruction" – destroying entrenched business models and technologies through some innovative vehicle to create value, whether in goods or services, for consumers. At the same time, certain technologies are converging, allowing us to do more things with the same wire or radio waves, or with the same device – whether communication with family, sharing in-depth research with a colleague halfway around the world, or for entertainment, such as a movie theater that now resides in the palm of your hand, or a mobile communications device that is a personal banking institution.

One area in which new technologies are particularly exciting is in the use of the radio waves, or electromagnetic spectrum. For wireless services, spectrum is a necessary ingredient. If we want new and innovative wireless services, we thus need to make this critical input available. In the U.S., we are doing just that. Last year we assigned

licenses for 90 megahertz of spectrum in the Advanced Wireless Services (AWS) auction. In January, we will auction 62 megahertz of the valuable 700 MHz Band, spectrum that some have referred to as "beachfront" property. The 700 MHz Band is part of the DTV transition, which in total will make 100 megahertz of spectrum available both for consumers – in the form of innovative new services – and public safety providers – in the form of a nationwide broadband network for public safety first responders.

I never give a speech without talking about the benefits of this Digital TV transition, which, by law, will take place all in one day, February 17, 2009. I applaud the industries that are partnering with all federal entities to provide outreach, with the broadcasters recently pledging \$697 million for a consumer education campaign, and the cable industry pledging \$200 million for a similar effort. All consumers – and this means all of us – can get informed by going to www.dtv.gov.

As we look in amazement at the new technologies that come forward, we should not lose sight of the fact that we will not know – and cannot know – where the market will take us next. And when they try to predict the future, the experts often get it wrong. It was only half a century ago that the Chairman of IBM predicted "a world market for maybe five computers" and Popular Mechanics estimated that the computers of the future would "weigh no more than 1.5 tons."

That's precisely why I believe in regulatory humility in the face of an uncertain future and ever-changing world. This is something I have tried to practice, both as a state regulator and now a federal one. I look to and especially encourage the industry to put forward market-based solutions whenever possible. Most of the consumer benefits we see in the communications sector of the U.S. economy are directly related to the

significant levels of competition, and to our deregulatory policies that have encouraged that investment. I also understand the need for regulation, if and when there is a clear market failure. Such market failure is probably less common in communications markets as compared to other markets, but we should not assume that it does not exist, and we should acknowledge that market failure may at times occur with convergence, with new competitors appearing, sometimes in most unlikely forms, while others go the way of the buggy whip and the rotary phone.

At the same time, we should not assume there will not be "government failure," such as when we adopt rules and regulations that we intend and expect will benefit consumers but, in the long run, do not in fact do so. I suppose it may not be a popular position to take here in Washington, DC; that is, the idea that policymakers, like businesspeople in the market, make mistakes too. That is at least partly because we have imperfect information. I used to tell parties at the state level: If you don't put it in the record, then you can't expect the decision to be based on something that isn't even available to the decision-maker.

Government should be a referee in the communications industry, making sure that everyone plays by fair and consistent rules; not the coach, telling everyone how to play the game.

Broadband

Connecting to the Internet at broadband speeds means connecting to the world – *literally*. The Internet can, with the click of a mouse, take our children on an educational adventure – to the Louvre or the Library of Congress, on an exploration of the Great

Barrier Reef or the Great Wall of China. It can help promote civic participation by adults

— like the online voting I mentioned earlier — and access to healthcare for families.

Access to the Internet at broadband speeds can increase workers' productivity, which

makes us all wealthier — individuals, firms, and societies.

I have already commented on the fast-changing world of technology, and the market to provide broadband service is an excellent example. In the U.S., we have opted for a light regulatory touch for broadband service provided over cable systems, telephone lines, power lines, and wireless platforms, which helps ensure what we refer to as a level playing field – or equality of regulation – among competing providers, no matter the technology or business model. A light regulatory touch promotes vigorous competition, and last year the number of broadband connections in the U.S. by all these competing providers increased by 61 percent, to a total of 82.5 million lines.

Each platform competes in unique ways. For example, telephone companies and cable companies seek to offer services – wireline voice, wireless voice, video, and high-speed Internet access – with triple-plays and quadruple-plays that include a broadband component. We have provided regulatory relief to traditional telecom companies to add multi-channel video to compete with cable, and they are doing so – AT&T with U-verse and Verizon with an investment of \$23 billion in FiOS. Cable companies are competing with telecom companies by adding voice service – most often VoIP – and cable already has 32 million broadband connections. As providers build bigger pipes, access to high-speed Internet service grows even faster and hopefully more affordable.

On the wireless side, satellite service providers also offer access to broadband, and so do terrestrial wireless service providers. In the U.S., we estimated there were

about 23 million wireless broadband connections last year, counting satellite and mobile devices, and I hope we will observe an even greater increase for 2007 as new partnerships and business models unfold.

The convergence of wireless technologies is especially exciting in the U.S., where our technology-neutral approach to policy has allowed CDMA and GSM to compete head-on. This competition has produced dramatic results, with wireless providers employing a quarter million people and generating annual industry revenues well over \$100 billion. Most notably from this competition, there are over 240 million mobile subscribers in the U.S. who use over *two trillion* minutes every year. As these mobile technologies compete to offer Internet access with, for example, EDGE and EV-DO, we see a convergence in which more functions – such as authentication and network security and quality of service – can be handled at the network level. This convergence will make interoperability easier, lower costs, and facilitate improvements to network design.

Much has been written about WiMax, from the potential for another "last mile" broadband connection to the home, to fast connections that may reach 20, or 50, or even 70 mbps. Despite recently losing its CEO and cancelling a WiMax partnership, by the end of this year, Sprint Nextel will launch its WiMax network in Baltimore, Chicago, and Washington, DC. And let's not forget WiFi, the technology of choice for coffee shops and community centers around the world. Best of all, the type of technology no longer matters in this world of convergence; we communicate and connect in cyberspace.

I also would like to highlight public/private partnerships, such as "Connected Nation," a non-profit group that coordinates governments, communities, businesses, and service providers to identify supply and demand conditions and tailor services to unmet

needs. Through GIS mapping of areas without access to broadband, Connected Nation outlines a "business case" scenario, identifies barriers to consumer adoption, and helps develop plans to build out broadband services. In the State of Kentucky, which is approximately the size of South Korea and has almost half of its population living in rural areas, a local public/private partnership, "Connect Kentucky," envisions 100 percent broadband coverage of the entire state by the end of this year. My home state of Tennessee recently launched "Connect Tennessee," and there are other examples where cities, local mayors, communities and neighborhoods are leading efforts to attract broadband providers rather than waiting on a government program or government subsidies. This is truly what democratization of the Internet means. Most public policy issues are never solved entirely by the government. That is why I generally believe in market-based solutions and in creative approaches, such as public/private partnerships, which converge at the intersection of technology, consumer needs, and proven business models – all of which is "in the public interest."

Online Safety

I could not leave today without addressing content from a perspective that is particularly important to me. As we work to deploy broadband and access to the Internet to every family in America, and as these families enjoy the educational and social benefits that this access provides, we also must recognize and educate our citizens regarding the potential dangers of the Internet to our children. Just as the Internet can transport our children anywhere in the world in a mouseclick, so can it take them to the back alleys of abuse and sexual exploitation. In fact, one in seven youth between the

ages of 10 and 17 in the US has been sexually solicited online. Parents need to be just as aware of the dangers in their online world as they are in their offline one.

The importance of this issue transcends national boundaries. In fact, the ITU and many individual member countries have undertaken initiatives to address protection of our children while they are online. I was recently approached to join a major initiative by Egypt's First Lady, as children in the Middle East become more connected and face the same problems as do our youth here in the U.S.

I am pleased that, here in the U.S., many companies have made important strides to help in this effort, including starting education and outreach campaigns to teach parents about the tools that are available to protect their kids online. For example, Cox Cable hosted a "teen summit" with Miss America to reach teens by video. The Entertainment Software Association recently hosted a Congressional forum on Capitol Hill, and nonprofit groups such as Common Sense Media have partnered with Internet service providers to offer ratings systems and blocking tools. To reach young children, the I Keep Safe Coalition has developed animated programs and a mascot to teach online safety. The National Center for Missing and Exploited Children also has developed a variety of resources for both parents and kids, such as NetSmartz, an award-winning interactive educational program. I commend these tools to you as parents and as partner companies.

Now that wireless devices are being marketed to children as young as six, I have encouraged the wireless industry to be part of the solution as well. I have been working with many of your companies and associations regarding particular solutions to this

critical issue. I encourage each of your companies, with some of the best and brightest minds in the world, to be part of the solution.

While I have been and will continue to be very passionate in urging companies to help protect our children, I also want to be clear. This is not about censorship. It is about illegal activities online – child solicitation and worse – that are clearly criminal. We as government leaders along with law enforcement officials have addressed issues that have already arisen in cyberspace, such as financial fraud and identity theft. Now we must begin applying this expertise to child health, child safety, and child protection.

Finally, while I do not have time to discuss impact of technology on the media and broadcasting industry, I see that this is an issue for discussion today, and it is a hot topic at the FCC. As you all know, the FCC has been reviewing its media ownership rules for over a year. We have had six hearings at locations across the country, from D.C. to Tampa to Nashville to Los Angeles to Chicago to Seattle – we have literally gone from sea to shining sea – and we have heard from thousands of Americans, experts, professors, broadcasters, news people, and even college students. In addition, we have commissioned studies from the leading economists and academics studying this industry. This has been an exceedingly open and transparent process, and all of the input we have received will be carefully considered.

In closing, we should remember that technology is truly an international language. It is understood across cultures and respected for its tremendous ability to connect us in new ways – from e-commerce, e-government and e-911 alerts, to access to education and healthcare and the "virtual" jobs of the future, to social networking. But it will take great innovation – by engineers, business leaders, community leaders, and yes, policy makers –

to help connect all our citizens. Ensuring that the advances in technology continue – and that they serve all of us, but especially our children – requires a global dialogue in this shared language. I look forward to staying connected with many of you as we work together in this noble effort.